

### PROJECT AT A GLANCE

**Project:** Drone and LIDAR Survey  
**Location:** East Yorkshire  
**Year:** 2020  
**Duration:** 10 Days



### PROJECT BRIEF

LSTC was approached by a local council to produce a Topographical survey for a feasibility study of land and roads around East Yorkshire totalling 300 acres.

### CHALLENGES

- 🔍 To deliver a complete package of drawings which are based around a very busy existing road system.
- 🔍 To deliver standard drawings in a timely manner.
- 🔍 To liaise with landowners along the route and fit the survey in to the clients timeframes and expectations.
- 🔍 To minimise traffic management or find an alternative.

### OUR APPROACH

After reviewing the scheme and establishing traffic management would be very challenging and costly, it was decided to approach the scheme with Lidar attached to a combination of drone and a vehicle fly the fields and drive the roads. This type of survey coordinated with the use of traditional survey equipment to fill in any gaps that Lidar could not penetrate was deemed to be the most cost effective. This approach was greeted well by the client and LSTC were awarded the contract as cost savings had been established using these methods without compromising quality.

### PROJECT OUTCOME / DELIVERABLES

The client was provided with a full drawing pack consisting of:

- 🔍 AutoCAD drawings.
- 🔍 Raw Lidar data for use by the client in the future.
- 🔍 Orthorectified imagery from Aerial photography.

The scheme was delivered successfully and all disciplines of the survey were delivered accurately, efficiently and within timeframes. Using the Lidar on a vehicle thus not needing any traffic management proved the biggest time and cost saving and using Lidar on the drone saved many man hours in the field. However more CAD work is required than usual, but this still made the overall scheme more cost effective.